

CLEAN COPY OF ABSTRACT

A wide area object tracking system comprises a primary and two secondary base stations. Each secondary base station is coupled to the primary base station to define a tag detecting cell. Each station receives a signal from a tag attached to a tracked object, yielding three signals indicative of the tag location within the cell. Many overlapping cells in a given space allow tracking objects within that space. The system comprises a central server coupled to the primary base station, and may include at least one tag recording unit and a tag recovery apparatus both coupled to the central server. The primary base station uses three channels to communicate with the tag, the central server, and with at least one other primary base station, the secondary base stations, and a portable control unit.